



INSTITUT PASTEUR

Elisabeth Carniel, MD, Ph.D,  
*Yersinia* Research Unit  
Institut Pasteur,  
28, rue du Dr. Roux  
75724 Paris Cedex 15, France  
Phone: (33-1)-45-68-83-26  
Fax: (33-1)-40-61-30-01  
E-mail: [carniel2@pasteur.fr](mailto:carniel2@pasteur.fr)

# ANNEXURE – I

Dr. J. S. VIRDI  
READER  
DEPARTMENT OF MICROBIOLOGY  
UNIVERSITY OF DELHI SOUTH CAMPUS  
NEW DELHI -110 021 (INDIA)

Dear Dr. Viridi,

Please find in the following pages the results of the biotyping and serotyping of the *Yersinia* strains that you sent us.

Sincerely yours,

Elisabeth Carniel, MD, Ph.D,  
Head of the *Yersinia* Research Unit  
Director of the National Reference Laboratory and  
WHO Collaborating Center for *Yersinia*

Your lab No.	I. P. Number	Species	Biotype	Serogroup
K/Y/30	26142	<i>Yersinia intermedia</i>	4	40
K/Y/31	26143	<i>Yersinia intermedia</i>	4	40
T/Y/34	26144	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
R/Y/36	26145	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
O/Y/43	26146	<i>Yersinia intermedia</i>	4	40
T/Y/54	26147	<i>Yersinia enterocolitica</i>	1A	10-34
PO/Y/1-3	26148	<i>Yersinia enterocolitica</i>	1A	7,8-8-8,19
PO/Y/2-1	26149	<i>Yersinia enterocolitica</i>	1A	NAG
PO/Y/3-1	26150	<i>Yersinia enterocolitica</i>	1A	NAG
PO/Y/5-3	26151	<i>Yersinia enterocolitica</i>	1A	7,8-8-8,19
PO/Y/9-1	26152	<i>Yersinia enterocolitica</i>	1A	7,8-8-8,19
PO/Y/12-1	26153	<i>Yersinia enterocolitica</i>	1A	7,8-8-8,19
T/Y/33	26259	<i>Yersinia intermedia</i>	1	NAG
O/Y/44	26260	<i>Yersinia enterocolitica</i>	1A	6,31
T/Y/48	26261	<i>Yersinia enterocolitica</i>	1A	10-34
T/Y/53	26262	<i>Yersinia intermedia</i>	4	40
T/Y/55	26304	<i>Yersinia intermedia</i>	4	40
R/Y/56	26305	<i>Yersinia enterocolitica</i>	1A	10-34
KO/Y/57	26306	<i>Yersinia intermedia</i>	2	NAG
R/Y/59	26307	<i>Yersinia intermedia</i>	4	40
O/Y/60	26308	<i>Yersinia intermedia</i>	4	40
O/Y/61	26309	<i>Yersinia enterocolitica</i>	1A	10-34
K/Y/62	26310	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
KO/Y/63	26311	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
K/Y/64	26312	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
T/Y/65	26318	<i>Yersinia intermedia</i>	4	40
O/Y/66	26313	<i>Yersinia intermedia</i>	4	40
R/Y/67	26314	<i>Yersinia enterocolitica</i>	1A	10-34
K/Y/68	26315	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
KO/Y/69	26316	<i>Yersinia enterocolitica</i>	1A	41,42
O/Y/70	26317	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C16	27359	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C17	27360	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C20	27361	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C27	27362	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C51	27363	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C92	27365	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C93	27366	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C64	27364	<i>Yersinia enterocolitica</i>	1A	6,30-6,31
C94	27381	<i>Yersinia enterocolitica</i>	1A	NAG
C112	27382	<i>Yersinia enterocolitica</i>	1A	NAG
C114	27383	<i>Yersinia enterocolitica</i>	1A	NAG
C115	27384	<i>Yersinia frederiksenii</i>		NAG
C130	27385	<i>Yersinia enterocolitica</i>	1A	NAG
C161	27386	<i>Yersinia enterocolitica</i>	1A	NAG
C167	27387	<i>Yersinia enterocolitica</i>	1A	NAG
C192	27388	<i>Yersinia enterocolitica</i>	1A	NAG
C203	27389	<i>Yersinia frederiksenii</i>		35

C249	27390	<i>Yersinia frederiksenii</i>		35
C503	27399	<i>Yersinia frederiksenii</i>		35
C551	27400	<i>Yersinia frederiksenii</i>		35
C567	27401	<i>Yersinia frederiksenii</i>		35
C580	27402	<i>Yersinia frederiksenii</i>		35
C594	27477	<i>Yersinia intermedia</i>	2	NAG
C702	27478	<i>Yersinia intermedia</i>	1	7,8-8
C714	27479	<i>Yersinia intermedia</i>	1	NAG
C752	27480	<i>Yersinia intermedia</i>	1	NAG
C760	27403	<i>Yersinia enterocolitica</i>	1A	6,30
C770	27405	<i>Yersinia enterocolitica</i>	1A	6,30
C764	27404	<i>Yersinia enterocolitica</i>	1A	6,30
C772	27406	<i>Yersinia enterocolitica</i>	1A	6,30
C777	27407	<i>Yersinia enterocolitica</i>	1A	6,30
C782	27408	<i>Yersinia enterocolitica</i>	1A	6,30
C791	27425	<i>Yersinia enterocolitica</i>	1A	6,30
C792	27426	<i>Yersinia enterocolitica</i>	1A	6,30
C801	27427	<i>Yersinia enterocolitica</i>	1A	6,30
C845	27429	<i>Yersinia enterocolitica</i>	1A	6,30
C842	27428	<i>Yersinia enterocolitica</i>	1A	6,30
C855	27430	<i>Yersinia enterocolitica</i>	1A	6,30
C871	27431	<i>Yersinia enterocolitica</i>	1A	6,30
C876	27432	<i>Yersinia enterocolitica</i>	1A	6,30
C927	27433	<i>Yersinia enterocolitica</i>	1A	6,30
C931	27434	<i>Yersinia enterocolitica</i>	1A	6,30
C945	27481	<i>Yersinia enterocolitica</i>	1A	6,30
C963	27482	<i>Yersinia enterocolitica</i>	1A	NAG
C975	27483	<i>Yersinia enterocolitica</i>	1A	6,30
C998	27484	<i>Yersinia enterocolitica</i>	1A	6,30
C1021	27485	<i>Yersinia enterocolitica</i>	1A	NAG